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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,732	10/29/2003	Cheng-Liang Hou	0063-115001	2651

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EXAMINER

JAIN, RAJ K

ART UNIT	PAPER NUMBER
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2416

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/694,732	Applicant(s) HOU, CHENG-LIANG	
	Examiner RAJ JAIN	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12,14-19, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-12,14-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: With respect to claim(s) 16-22, the disclosure fails to disclose "a computer readable medium" having instructions executed by a processor. Suggest amending the specification as necessary. Appropriate correction is required.

With respect to claim(s) 1, 8, 9 and 16, the claims the limitation "...**receiving a request** to transmit data over a port of a switch **at a requested transmission rates; selecting one of the first plurality of data transmission rates or one of the second data transmission rates** at which to transmit data over the port, **wherein the selected transmission rate is based on the requested transmission rate**" in appropriate lines. There is insufficient antecedent basis for these limitations in the specification. Appropriate correction to the claims is required.

Claim Objections

Claims 6, 14 and 21 objected to because of the following informalities: The subject claims recite "...the first incremental value is 64 Kbps, the first incremental value is 1 Mbps...." this does not make sense. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 1-4, 6, 7 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the

claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process.

The elements of Claim(s) 1 of “storing, receiving, selecting or transmitting....” are broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent and further

1) do not tie to another statutory class (such as a particular apparatus) by identifying the apparatus that accomplishes the method steps.

2) do not have a structure required by the claim, or positively recited in the body of the claim in association with a step significant to the inventive concept.

A claim reciting an adequate structural tie must positively recite the structure of another statutory category in association with a step significant to the inventive concept. The following are examples of structural recitations **that do not constitute** adequate structural ties per se: (1) Structure recited in a preamble alone, (2) structure in a phrase expressing intended use or purpose, and (3) structure in a step insignificant to the inventive concept, such as nominal pre or post solution activity.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-12 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi et al (USP 6,693,913 B1) in view of Marin et al.

Re claim(s) 1, 8, 9 and 16, Chiussi discloses a method and apparatus, comprising:

storing a first plurality of data transmission rates in a register (Figs. 1-3, registers 12, 18), wherein each of the first plurality of data transmission rates are spaced from

each other by a first incremental value (basic rate r1 is the first incremental value as a discrete data rate, see also claim 1 lines 20-24);

storing a second plurality of data transmission rates in a register (Figs 1 & 2 represent a second data transmission rate in registers 12 and 18), wherein each of the second plurality of data transmission rates are spaced from each other by a second incremental value (basic rate r2 is the second incremental value);

receiving a request to transmit data over a port of a switch at a requested (claim 1, basic data rate is matched per the request of new connection establishment) transmission rates selecting one of the first plurality of data transmission rates or one of the second data transmission rates at which to transmit data over the port, wherein the selected transmission rate is based on the requested transmission rate (claim 1 lines 35-40; 62-67); and

transmitting data through the port using the selected data transmission rate (col 9 lines 1-9).

Chiussi fails to explicitly disclose whereby the second data rate is greater than the first data rate.

Marin discloses whereby the second data rate is greater than the first data rate (Fig. 5, col 11 lines 14-20; 30-45). The allocation of variable data rates amongst different data types (i.e. Audio, video, data, et) allows for optimum bandwidth efficiency with minimum data loss.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Marin within Chiussi so as to improve overall network efficiency.

Re claim(s) 2, 10 and 17, Chiussi fails to explicitly disclose whereby the second data rates are greater than the first data rates.

Marin discloses whereby the second data rates are greater than the first data rates (Fig. 5, col 11 lines 14-20; 30-45). The allocation of variable data rates amongst different data types (i.e. Audio, video, data, et) allows for optimum bandwidth efficiency with minimum data loss.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Marin within Chiussi so as to improve overall network efficiency.

Re claim(s) 3, 11 and 18 Chiussi storing a third plurality of data transmission rates (Fig. 1, a third transmission stream amongst the plurality of streams stores a third transmission rate r_3), wherein each of the third plurality of data transmission rates are spaced from each other by a third incremental value (third incremental value is basic rate r_3); selecting one of the first plurality of data transmission rates, one of the second data transmission rates, or one of the third plurality of data transmission rates at which to transmit data over the port, wherein the selected transmission rate is based on the requested transmission rate (claim 1 lines 35-40; 62-67).

Chiussi fails to disclose whereby a third data rate is greater than second data rate.

Marin discloses whereby the third data rate is greater than the second data rate (Figs. 5 & 6, col 11 lines 14-20; 30-45, rate table Fig. 6 shows different data rates R_1 , R_2 , etc, col 10 lines 55-61). The allocation of variable data rates amongst different data types (i.e. Audio, video, data, et) allows for optimum bandwidth efficiency with minimum data loss.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Marin within Chiussi so as to improve overall network efficiency.

Re claim(s) 4, 12 and 19, Chiussi fails to explicitly disclose whereby the third data rates are greater than the second data rates.

Marin discloses whereby the third data rates are greater than the second data rates (Figs. 5 & 6, col 10 lines 55-61). The allocation of variable data rates amongst different data types (i.e. Audio, video, data, et) allows for optimum bandwidth efficiency with minimum data loss.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Marin within Chiussi so as to improve overall network efficiency.

Claims 6, 7, 15, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi et al (USP 6,693,913 B1) in view of Marin et al and further in view of Leung (US 6597693 B1).

Chiussi and Marin fail to disclose variable data rates.

Leung discloses variable data rates as appropriate (Fig. 1; col 2 lines 6-32; col 3 lines 28-67).

Leung illustrates a common architecture for all of the ports within a network switch or router or any other applicable transmission device that is scalable over a wide range of data rates as necessary to accommodate different data rate requirements and optimizing the bandwidth capacity within a network.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Leung within Chiussi so as to improve overall network bandwidth efficiency by allowing for scalable data rates for different data sources (audio, video, etc.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Raj K. Jain/

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